Notice of Allowability	Application No.	Applicant(s)	
	10/783,904	ECKARDT ET AL.	
	Examiner	Art Unit	
	Gary L. Laxton	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amendment filed 08/05/2005*.

2. ☒ The allowed claim(s) is/are *1-13*.

3. ☒ The drawings filed on *20 February 2004* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Gary L. Laxton
Primary Examiner 8/19/05
Art Unit: 2838

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-13 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Schewesig US 6,495,986 discloses a safe speed monitoring for sensorless three-phase drive. Wherein a setpoint stator frequency value is limited and monitored in a two-channel mode in two systems with approximate redundancy deriving for each system a respective control signals for the electrical valves of the inverter, which can be compared with one another in two systems of monitoring electronics.

Schewesig US 6,573,681 discloses drive control for a three-phase ac motor via an inverter using safe technology. Wherein the combining of two technically contrasting functions of "'safe stopping" and "'braking by armature short-circuiting" is served by using two means for pulse inhibition to block the respective current valves in the event of a fault by interruption respective supply voltage for driving the control valves of the upper bridge arm and of the lower bridge arm.

Janicke et al US 6,909,255 discloses a drive controller for a self-commutated converter having two half-bridges with converter valves, the drive controller comprises two control circuits being associated with a corresponding half-bridge; at least two switches, each switch having an input that is directly or indirectly connected to an external voltage and an output that is directly or indirectly connected to a pulse-inhibiting path; at least two pulse-inhibiting controllers, each

switch receiving control signals from a corresponding one of the pulse-inhibiting controllers; and a buffer unit arranged in the pulse-inhibiting path for briefly maintaining a supply voltage of the control circuits if a pulse-inhibiting path electrically disconnects at least one of the control circuits from the external voltage.

However, none of the prior art teaches or suggest, inter alia, a drive controller having first switches connected between a voltage supply and the inputs of the control circuits for switchably connecting the inputs of the control circuits to an external voltage; second switches connected electrically in parallel with the first switches in one-to-one correspondence, the connected first and second switches being decoupled from each other by decoupling diodes and forming a set of decoupled switches; and control units providing control signals to the connected first and second switches so as to alternatingly switch the connected first and second switches on and off, in regard to claims 1 and 2.

Nor does the prior art teach or suggest, inter alia, a drive controller two control circuits having each an input and an output, wherein the output of one control circuit is operatively conceded to one of the half- bridges for triggering its converter valves, and the output of the other control circuit is operatively connected to the other half-bridge for triggering Its converter valves; a circuit assembly having an output supplying a DC voltage to the inputs of the control circuits, said inputs of the control circuits being connected in parallel; two switches with each switch having an input connected between an external voltage and an output connected to an input of the circuit assembly; and control units providing pulsed control signals to the switches to control the switches so as to maintain the DC voltage at the input of the control circuit if one of the switches is in an open position, in regard to claims 3 and 5-8.

Nor does the prior art teach or suggest, inter alia, a drive controller having a circuit assembly supplying the DC voltage that includes a rectifier, and wherein a potential separation device is connected before the rectifier and a support capacitor connected to the output of the rectifier, in regard to claims 4 and 9-13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,909,255 Janicke et al, US 6,573,681 Schewesig and US 6,495,986 Schewesig, as noted above.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary L. Laxton
Primary Examiner
Art Unit 2838

8/19/05